EA Form R 1/2007

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. **Applicant/Contact name and address:**

   LINDA A SMITH TRUST
   PO BOX 1480
   WHITEFISH, MT 59937

2. **Type of action:** Surface Water Application for Beneficial Water Use Permit 76LJ 30158864

3. **Water source name:** Whitefish River (Whitefish Lake)

4. **Location affected by project:** Whitefish Lake Summer Homes Addition 1 Amended Lot 1, N2NWNW Section 14, Township 31N, Range 22W, Flathead County, Montana.

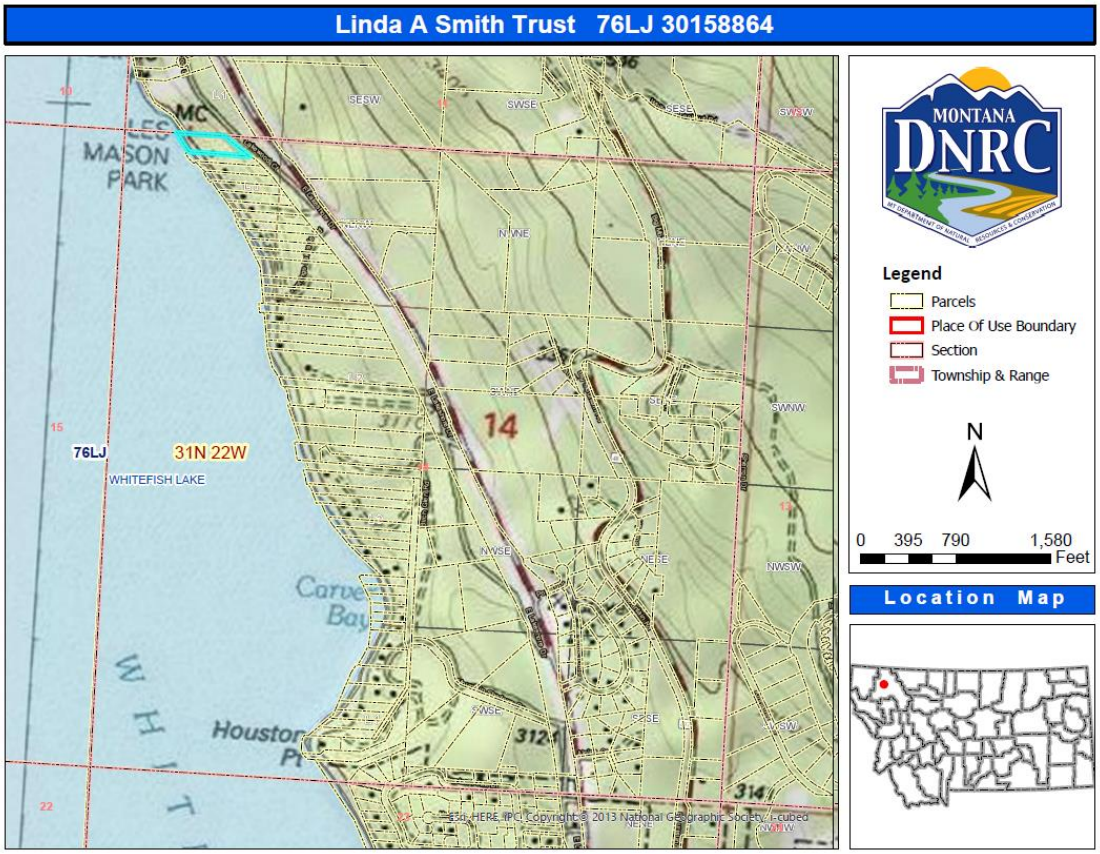

Figure 1. Map of the proposed place of use and point of diversion.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicant proposes to divert water from the Whitefish River (Whitefish Lake), hereafter Whitefish Lake, using a pump. Applicant requests a 35.0 GPM flow rate up to an annual volume of 1.0 AF for year-round domestic use and 21.6 GPM flow rate up to an annual volume of 2.5 AF for irrigation of 0.15 acres of lawn and garden from April 15 – October 15 annually. The point of diversion (POD) and place of use is in Whitefish Lake Summer Homes Addition 1 Amended Lot 1, N2NWNW Section 14, Township 31N, Range 22W, Flathead County, Montana. The POD is in the Upper Flathead River Basin (76LJ), in an area not subject to water right basin closures or controlled groundwater area restrictions.

The DNRC shall issue a water use permit if the applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:

- U.S. Fish and Wildlife Service (USFWS): National Wetlands Inventory Wetlands Mapper
- Montana Natural Heritage Program: Endangered, Threatened Species, and Species of Special Concern
- Montana Department of Fish Wildlife & Parks (MTDFWP): Dewatered Stream Information
- Montana Department of Environmental Quality (MTDEQ): Clean Water Act Information Center
- U.S. Natural Resources Conservation Service (NRCS): Web Soil Survey

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity **-** *Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

The Applicant proposes to divert water from Whitefish Lake, which is not on the MTDFWP list of chronically or periodically dewatered streams.

Determination: No significant impact.

Water quality *- Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

According to the MDEQ Clean Water Act Information Center's 2020 Water Quality Information, Whitefish Lake is listed as "Fully Supporting" for primary contact recreation, agriculture, aquatic life. The aquatic life use is "threatened", potentially from impairments due to Mercury (no TMDL completed), and Polychlorinated Biphenyls (no TMDL completed). Whitefish Lake has not been assessed for drinking water beneficial use. The lake's Use Class is "A-1", meaning the waters are classified as suitable for drinking, culinary, and food processing purposes after conventional treatment for removal of naturally present impurities. Whitefish Lake's Water Quality Category is "5," meaning one or more applicable beneficial uses are impaired or threatened, and a total maximum daily load (TMDL) is required to address the factors causing the impairment or threat.

The proposed project will not affect the water quality of Whitefish Lake.

Determination: No significant impact.

Groundwater *- Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: N/A; this project diverts from a surface water source.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Applicant will divert water from Whitefish Lake at a maximum rate of 35.0 gallons per minute (GPM) using a Goulds model 35GS20CBM 2.0-horsepower (HP) 10-stage 4-inch submersible pump. The pump will be enclosed in a plastic flow sleeve and will include a check valve to prevent backflow of water from the system. The pump will be located approximately 15-feet below the low water elevation. A 1.25-inch diameter high density polyethylene (HDPE) water line will extend up from the pump and then 90-feet to the shore beneath the northwestern half of the proposed dock. The water line will extend another 45-feet (135-feet total) to a Well-X-Troll WX-250 vertical pressure tank and variable frequency drive (VFD) inside the basement of the house. The VFD will be set to ensure a constant system operating pressure of approximately 65 pounds per square inch (psi) to meet variable demands of domestic and irrigation uses.

The minimum operating pressure for domestic use will be maintained at 60 psi. After the pressure tank, water for domestic use will flow through a treatment system consisting of two sediment filters and a Pentek Ultraviolet Light prior to distribution to household fixtures.

A Hunter Pro-C irrigation control box will control the water for the irrigation system. An irrigation valve box and Hunter 1.0-inh posterior gastric vein (PGV) valves will convey water to each sprinkler zone. The irrigation zones will be served by 1-inch HDPE lines with 33 360° Hunter MP 1000 sprinklers, each requiring 0.98 GPM. The average operating pressure for the sprinkler system is 50 psi. Up to three zones will operate at any one time, utilizing no more than

21.6 GPM. The controller will be set to irrigate between 10 pm and 6 am to limit overlapping water use with the potable water demands of the residence.

The total dynamic head (TDH) of the system during peak demand is 186 ft, based on:

i. The system operating pressure of 60-psi (equivalent to 138.6 feet of head).

ii. A 21-foot elevation gain from Whitefish Lake's surface to the zone; and,

iii. The friction losses in the 135-foot length of 1.25-inch poly line at 35.0 GPM (equivalent to 26.4-feet of head).

The pump is capable of producing approximately 35.0 GPM at 190-feet TDH and 34.0 GPM at 200-feet TDH based on the applicant-provided pump and system specifications. This flow rate will allow the Applicants to supply water for domestic and lawn and garden irrigation purposes at an adequate operating pressure. The Department finds the system capable of producing and distributing the requested flow rate of 35.0 GPM and annual volume of 2.5 AF.

This project will not create any channel impacts, flow modifications, barriers, dams, or riparian impacts to Whitefish Lake, nor will it affect any wells.

Determination: No significant impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species *- Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants, aquatic species, or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

The Montana Natural Heritage Program website was reviewed to determine if there are any threatened or endangered fish, wildlife, plants, aquatic species, or any "species of special concern" in Township 31N, Range 22W that could be impacted by the proposed project. Twenty-two animal and twelve plant species of concern (Tables 1 and 2, respectively) were identified within the township and range where the project is located. Of these species, the Canada Lynx (*lynx canadensis),* the Grizzly Bear (*Ursus arctos*) and the Bull Trout (*Salvelinus confluentus*) are listed as threatened by the USFWS. An adequate quantity of water will still exist in the surface water source to maintain existing populations of Bull Trout, should they exist there currently. This area is already developed, and it is not anticipated that any species of concern will be further impacted by the proposed project.

Table 1. Animal Species of Concern			
Grizzly Bear (*Ursus arctos*)	Fisher (*Pekania pennanti*)	Canada Lynx (*Lynx canadensis*)	Long-legged Myotis (*Myotis Volans)*
Bobolink *(Dolichonyx oryzivorus)*	Hoary Bat *(Lasiurus cinereus)*	Sheathed Slug *(Zacoleus idahoensis)*	Little Brown Myotis (*Myotis lucifugus)*
Westslope Cutthroat Trout (*Oncorhynchus clarkia lewisi)*	Pygmy Whitefish (*Prosopium coulteri*)	Northern Alligator Lizard (*Elgaria coerulea*)	Bull Trout (*Salvelinus confluentus*)
Pileated Woodpecker (*Dryocopus pileatus)*	Varied Thrush (*Ixoreus naevius)*	Brown Creeper (*Certhia americana)*	Cassin's Finch (*Haemorhous cassinii)*
Evening Grosbeak (*Coccothraustes vespertinus)*	Pacific Wren (*Troglodytes pacificus)*	Long-Eared Myotis (*Myotis evotis)*	Common Loon (*Gavia immer)*
Wolverine (*Gulo gulo)*	Yuma Myotis (*Myotis umanensis)*		

Table 2. Plant Species of Concern			
Beck Water-marigold (*Bidens beckii/ Megalodonta bevkii*)	Crested Shieldfern (*Dryopteris cristata)*	Gray Lungwort Lichen (*Lobaria hallii)*	Panic Grass (*Dichanthelium acuminantum)*
Coville Indian Paintbrush (*Castilleja covilleana*)	Dense-flower Rein Orchid (*Piperia elongate)*	Kalm's Lobelia (*Lobelia kalmia)*	Slender Cottongrass (*Eriophorum gracile)*
Creeping Sedge (*Carex chordorrhiza)*	Giant Helleborine (*Epipactis gigantea)*	Nagoonberry (*Rubus arcticus)*	Watershield (*Brasenia schreberi_*

Determination: No significant impact.

Wetlands *- Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: N/A; project does not involve wetlands.

Ponds *- For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: N/A; project does not involve ponds.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

The proposed 1.0 acres of lawn and garden irrigation will not negatively impact the soil quality, stability, or moisture content. The soil type in the project area comprises Dystric Eutrochrepts (terraces) of outwash substratum consisting of silt loam to very extremely gravelly loam to very cobbly loamy sand. Slopes are 0 to 20 percent. The most limiting layer within the 80-inch soil profile has a moderately high to high capacity to transmit water. Soils in this area are not likely susceptible to saline seep.

Determination: No significant impact.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

This area is already developed, and any existing native vegetation has already been disturbed. It is not anticipated that issuance of a water use permit will contribute to the establishment or spread of noxious weeds in the project area. Noxious weed prevention and control will be the responsibility of the landowners, who must follow local noxious weed regulations.

Determination: No significant impact.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

There will be no impact to air quality associated with issuance of the proposed permit for beneficial use of surface water. However, fugitive dust should be controlled during development.

Determination: No significant impact.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: N/A; project not located on State or Federal Lands.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water, and energy not already addressed.*

All impacts to land, water, and energy have been identified. No further impacts are anticipated.

Determination: No significant impact.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

The project is consistent with planned land uses. It shall be the landowners' responsibility to comply with all local county & city planning and zoning regulations.

Determination: No significant impact.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

The proposed project will not inhibit, alter, or impair access to present recreational opportunities in the area. The project is not expected to create any significant pollution, noise, or traffic congestion in the area that may alter the quality of recreational opportunities. The proposed place of use and diversion do not exist on land designated as wilderness.

Determination: No significant impact.

HUMAN HEALTH - *Assess whether the proposed project impacts human health.*

This proposed use will not adversely impact human health.

Determination: No significant impact.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No_**X**_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights*.

Determination: No impact.
OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) *Cultural uniqueness and diversity?* None identified.

(b) *Local and state tax base and tax revenues?* None identified.

(c) *Existing land uses?* None identified.

(d) *Quantity and distribution of employment?* None identified.

(e) *Distribution and density of population and housing?* None identified.

(f) *Demands for government services?* None identified.

(g) *Industrial and commercial activity?* None identified.

(h) *Utilities?* None identified.

(i) *Transportation?* None identified.

(j) *Safety?* None identified.

(k) *Other appropriate social and economic circumstances?* None identified.

2. ***Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts: None identified.

Cumulative Impacts: None identified.

3. ***Describe any mitigation/stipulation measures:***

None.

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:***

The only alternative to the proposed action would be the no action alternative. The no action alternative would not authorize the diversion of water from Whitefish Lake.

III. Conclusion

1. Preferred Alternative

Issue a water use permit if the Applicants prove the criteria in 85-2-311 MCA are met.

2. Comments and Responses

None.

3. Finding:

*Yes___ No_**X**_ Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

No significant impacts related to the proposed project have been identified.

Name of person(s) responsible for preparation of EA:

Name: Kristal Kiel
Title: Water Resource Specialist
Date: March 28, 2023